DOCUMENT RESUME

ED 205 623 UD 021 097

AUTHOR	Mallory, Arthur
TITLE	Competency Testing. [CEMREL Paper 2].
INSTITUTION	CEMREL, Inc., St. Louis, Mo.
SPONS AGENCY	National Inst. of Education (ED), Washington, D.C.
PUB DATE	Oct 80
NOTE	15p.: Paper prepared for the Midwest Policy Seminar (St. Louis, MO, October 15-17, 1980). Seminar convened by the Urban Education Program, CEMREL, Inc. For related documents, see UD 021 090, UD 021 096-098, and UD 021 102.
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	Accountability; Administrative Policy; *Basic Skills; Competency Based Education; Elementary Secondary Education; Grade 8; *Minimum Competency Testing; School Districts; State Boards of Education
IDENTIFIERS	*Basic Essential Skills Test (Missouri); *Missouri

ABSTRACT

This paper describes Missouri's minimum competency testing program. The administration, funding, organization, goals and evaluation procedures of the testing program, which evaluates all eighth graders in the State, are outlined. Also discussed are the relationship between the State board of education and the local districts and how State policy is communicated to individual district administrators. Finally, the paper provides information on how the tests are used to improve both curriculum and student achievement. (APM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED205623

OCT 30 1980

COMPETENCY TESTING

[CEMREL Paper 2]

Arthur Mallory
Commissioner of Education
State of Missouri

Prepared for
MIDWEST POLICY SEMINAR
convened by
Urban Education Program
CEMREL, Inc.
funded by a grant from the
National Institute of Education

St. Louis, Mo.
October 15-17, 1980

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

UD021097

Prepared by CEMREL, Inc., a private nonprofit corporation supported in part as an educational laboratory by funds from the National Institute of Education, Department of Education. The opinions expressed in this publication do not necessarily reflect the position or policy of the National Institute of Education, and no official endorsement should be inferred.

Copyright on this document is claimed only during the period of development, test, and evaluation, unless additional authorization is granted by the National Institute of Education to claim copyright on the final version. For information on the status of the copyright claim, contact either the copyright proprietor or the National Institute of Education.

Copyright 1980, CEMREL, Inc.

The initiative for Missouri's competency testing program was taken by the State Board of Education, which in 1976 directed the Department of Elementary and Secondary Education to develop an instrument to evaluate Missouri students' performance in the application of basic skills to everyday situations. The test development effort resulted in the Basic Essential Skills Test (BEST), which every eighth grader in Missouri's public schools must take under an amendment to the classification standards which the State Board of Education adopted and filed as a rule. Once a policy is adopted and filed in the office of the Secretary of State, it has the effect of law. The amendment states:

> "Beginning with the 1978-79 school year, each school district shall administer the Basic Essential Skills Test (BEST) to pupils in Grade 8 according to instructions provided by the Department of Elementary and Secondary Education. In subsequent years, the test shall be administered annually to all pupils in Grade 8 and those pupils above Grade 8 who did not take or did not pass the test or any subtest previously (does not apply to pupils who were 8th graders prior to 1978-79). Pupils enrolled in special education classes may be exempt or given the test in a modified manner when specified in the Individualized Education Program (IEP)."

Passing the test is not presently a state requirement for grade-to-grade promotion or high school graduation, although local school boards can make it such a requirement at their discretion.

It is fair to say that the adoption of new classification standards is an example of a situation in which state and local values and interests sometimes do not coincide, but most policies of the State Board of Education are adopted only after a general consensus of school people has been reached.

The BEST is a three-part, criterion-referenced test, covering the areas of reading/language arts, mathematics, and government/economics. Each subtest is based on 13 specific objectives and includes three test items related to each objective. To pass a subtest, a student must answer at least one item correctly for every objective and respond correctly to at least 75 percent of all 39 items which are a part of each written subtest. In addition to the 39 objectives measured by the paper-and-pencil test and machine scored at the state level, the BEST includes ten objectives which are assessed at the local level. These objectives relate to skills such as speaking, writing, and measuring, which cannot be measured by a written test. Local school officials establish the passing criteria for and assess students' performance on these ten objectives. The test is not timed, and most students take less than one hour to complete each part. Passing the test is considered an indication that a student has the minimum basic skills necessary for entry into further learning.

Handicapped students may be excluded from taking all or part of the BEST, if the exclusion is specifically stated in the pupil's Individualized Education Plan, which may also prescribe special testing techniques for that student. When such special testing techniques are required to assess a student's achievement of the BEST objectives, the local school district has responsibility for selecting and implementing those special methods. Information about any special techniques used and about any parts of the test which were excluded become a part of the student's test record.

The fact that we now educate everybody probably means we are doing better in our schools today than we did thirty years ago, but the standardized test results don't compare favorably because a lot of "average" and "below average"

students weren't in school then. Years ago, not everyone went to high school; when almost everyone does, it means some are not going to do well on tests. As we think about competency and objective measures, we must keep in mind that our efforts to provide educational opportunity for all youngsters contribute to the perception that schools aren't doing as well as they used to do, which may be an inaccurate perception.

I think it is important that we do keep asking ourselves, "How are we doing?" and, indeed, the public keeps asking us that. When we decided to develop a competency testing program, we sought broad public involvement in that effort. We held regional conferences to get input. A sixty-member advisory council was established which included parents, students, and representatives from business, industry, and agriculture as well as educators. The council helped establish the parameters of the test and reviewed its development. Subject matter specialists, university advisors, and measurement specialists were involved in developing and analyzing the test objectives and test items, and samplings of teachers were asked to comment on these as they evolved. Each item was field-tested, and revisions were made in response to those comments and field tests. The test was first piloted with about 12,000 students, was again revised and then provided for school districts to use on a voluntary basis during the spring of 1978. Administration to all eighth graders was first required in 1979.

The BEST is just one part--and the only part local districts are required to use--of the Missouri Testing and Assessment Program. That larger program is a combination of tests designed to meet the minimal and varied testing needs

of Missouri's public school districts and students. Different tests have been constructed to provide the type of data most useful at each level to teachers, parents, and students. Some tests are designed to produce comparative data; others are designed to provide information about individual students only. Together, they offer a logical sequence of evaluation instruments which have continuity and common purpose. All of the tests, K-7, complement the objectives of the BEST at the 8th grade.

We do not advocate district-to-district comparisons on the basis of test results, including those of the BEST, because we know socioeconomic factors almost invariably affect test scores and make such comparisons meaningless. Districts with high test scores should look at their data as closely as districts with low test scores so that they can be alert to developing trends and student needs. Testing is futile if it is not used as guidance for instructional management. To assist with this, the State Department makes available a wide range of curriculum materials which relate to the testing program objectives. We worked with local educators to develop three activity books--one for each subject area in the BEST--which provide teaching suggestions and activities (primary level through senior high) for each objective.

The BEST is provided at no cost to the districts by the State Department of Education, which also bears the cost of scoring and reporting test results to the local schools. The University of Missouri scores the tests, and individual student and school building and district data are returned to the schools. District and statewide data are sent to the State Department for analysis. Our intention is that those test results will be used as diagnostic tools with which instructional strategies will be designed to remediate the specific weaknesses of specific students.

At the State Department, carrying out the State Board of Education directive for the development and administration of the BEST required some reallocation of resources. Seven existing staff persons were given responsibility for the program, which meant some reduction of their time spent on other activities. In practice, they have tended to take on the BEST work in addition to their other duties.

At the local school district level, the test administration, of course, requires some staff time; the State Department provides detailed written instructions and makes available inservice training in relation to this task. The greater allocation of local staff time is likely to be involved in remediation, which is the responsibility of the districts.

In setting policy for competency testing, we have attempted to anticipate potential problems and to prevent them from developing. We believe we have been fairly successful in doing so, but certainly, some issues continue to be of concern.

I believe the State Board's policy on minimum competency testing is an appropriate response to the concerns of Missourians about what they are getting for the $1,600,000,000 they spend annually for public elementary and secondary education in the state. The initiative for a testing program, I believe, should come from educators rather than legislators, and we did that in Missouri. Evaluation should be an ongoing priority for educators, and we should take the lead in that effort. Testing programs should be flexible enough to allow revision that legislated requirements may not accommodate. Autonomy for the educational profession is, of course, a concern, and I would be less than candid if I did

not say that that concern may have added impetus to our efforts, especially in light of the number of states in which legislatures have taken the initiative.

Autonomy for the local school districts is always an issue in relation to a State Board of Education mandate. In Missouri, we have traditionally seen education as a local function, but legally it is a state function, with broad powers and duties given over to local school boards by the General Assembly. We have had few instances in which local districts appeared to view the BEST program as an incursion on their autonomy, and we believe that is true because we did take great pains to involve local school personnel and the public in the development of the testing program. The objectives we established--the minimum competencies we defined--were widely agreed upon and have not been considered unreasonable or undesirable. We took our time developing the test in order that we could get feedback at each step of the process and make revisions on the basis of that feedback. We did more field testing than commercial testing agencies do, and we have been told by those with expertise in testing that our BEST is, indeed, one of the best competency tests available. There are, nonetheless, a few districts which might not implement the BEST program except for the consequence of loss of classification.

One crucial ongoing factor in successful implementation of the testing program is communication with school districts, with other segments of the educational community, and with the general public. Anytime a state agency attempts to communicate with 556 school districts which have an impact on 900,000 youngsters and 55,000 classroom teachers, there is bound to be some misunderstanding. As the Commissioner of Education, I communicate at least monthly with every superintendent in the state in an attempt to keep him informed about matters

of mutual interest to us as we manage our work. Also, the President of the State Board of Education writes monthly to local school board presidents. Missouri Schools, the Department's monthly magazine, also carries stories and materials which reflect the policies of the Department. Each Department staff member understands the administrative policies of the Department and the rules and regulations of the State Board of Education affecting his or her program. This provides for consistent interpretation of policy to local districts.

We try to communicate clearly to the school districts the intent of the BEST, the procedures for administration, the responsibilities of local staff, the test results, and how the results may be used to diagnose problems and prescribe instructional strategies. Our staff has conducted many hours of inservice training in local districts, showing district personnel how to administer the test and use the results for diagnostic purposes. We have issued a variety of publications explaining the testing program, we have held numerous meetings and conferences and had many direct contacts with schools. We have published articles in professional journals and have had fairly extensive media coverage for the general public. Yet we still find that many people are unfamiliar with or poorly informed about the BEST program. In 1980, we have held a series of regional meetings with school superintendents and board members in an attempt to make sure they have current information. We have also held a series of meetings for faculties of all of the thirty-six Missouri colleges and universities, public and private, which offer teacher preparation programs. We believe most school districts and professional educators intend to be informed, but in spite of their intent to be informed and the State Department's intent to inform, we are less successful than we would like to be.

Even when we are successful in communicating with school administrators, we cannot control their flow of information to teachers, students, and parents. Most administrators do a conscientious job in this regard, yet we occasionally find the test results gathering dust on top of a filing cabinet rather than being used in developing teaching strategies and helping parents assist their children in reaching those skills which they have not yet mastered.

Occasionally, implementation problems arise in relation to test administration; management of a program of such magnitude is not simple. The State Department provides the administration procedures for each test, and it is up to the local districts to carry them out. We rely on the good faith of the school administrator and the local tester to ensure that the test is not compromised and is appropriately administered. To help assure test security, we have various versions of the test, as nearly equal in complexity as we know how to make them. We use the RASCH model (latent trait theory) to test the difficulty of each item. Sample items are piloted each year, and those items which meet the criteria are then inserted in the next year's test. Some of the test items may be reused in subsequent years. Administration problems are not just related to security; sometimes they can be as "simple" as test returns being mutilated in the mail and the test having to be administered again.

The local district decides who will be responsible for evaluating student performance on the ten locally assessed objectives. We recommend that the checking for satisfactory performance on these objectives be done well before the student takes the paper-and-pencil portion of the BEST, to allow time for additional help, practice, and opportunity to reach satisfactory performance.

The state suggests criteria for evaluating satisfactory student performance on these objectives, but local districts have the option of developing their own. Interestingly enough, the locally scored objectives tend to be the ones with the lowest scores.

Local school personnel sometimes question whether one of our test items is a good test of the concept to be measured. We follow up every criticism and make changes when it seems appropriate to do so. Test revision is a continuing process.

The use of test results to improve instruction is, I believe, the primary purpose for the program's existence, and it is also the area in which implementation is most difficult to assure. We try to provide every bit of helpful information we can. We send to the schools four types of summaries of BEST results, all to be used at the discretion of school personnel. One summary gives each student's scores in concise format on individual adhesive-backed labels. These are sent in duplicate, and we suggest that they be attached to the student's permanent file and perhaps the counselor's file. The second summary is an individual student computer sheet showing that student's performance on each subtest. We send three copies of this sheet, suggesting that one copy be placed in the student's permanent file, one copy be sent home, and one be sent to the appropriate subject-matter teacher. In addition, we send a summary which is a school district report including data for all students tested. We provide this hoping that districts will find it helpful in publicizing the test results, in comparing districtwide performance from year to year, and in reviewing curriculum. The fourth summary is a roster of

students who did not pass one or more of the subtests or locally evaluated objectives and who need additional instruction. We provide all this information and emphasize that low scores on the BEST should result in the local board of education and faculty immediately assessing the causes of the low scores and taking whatever action is necessary to remedy them. Our area supervisors of instruction do monitor local action, and if a district persists in inaction, that information goes into the classification reports.

I might say, parenthetically, that we try to ensure compliance to all programs without assuming the posture of offensive meddling. Generally speaking, that is easier with state programs than with federal programs we must monitor. With state programs we usually rely on the integrity of local school people; with federal programs we are often required to take a more rigorous approach.

In order for the BEST results to be used optimally, each school district must analyze its students' performance on the test, objective by objective. Areas of strength and weakness need to be identified not only on an individual basis but also on a school and districtwide basis so that corrective measures can be taken. Further, each school district should explain the meaning of the district test results for all patrons of the school district and spell out what steps the district plans to follow to improve test performance where that is needed. There need to be follow-up procedures for all students who fail to master any of the objectives of the BEST to be certain they do not leave school without mastery of all the essential skills. Beyond that, every district needs to develop a program which ensures (a) every teacher at every grade level knows the objectives of the BEST and is aware of his or her

responsibilities for teaching them at each grade level, (b) every student knows the objectives of the BEST and the importance of mastering each one, and (c) every parent knows the objectives of the BEST and understands the responsibilities of the home in assisting the student to master each one. That kind of program demands commitment of time, energy, resources, and creativity, which I know are not easily achieved. It demands "teaching to the test" in the best sense of the word--not teaching test items but teaching concepts that apply to the BEST objectives. It means a comprehensive instructional management program geared to those goals. We should not be teaching one thing and testing another.

We also provide the schools with recommendations for parents for ways to use the BEST information to help their children in areas in which they did not score as well as they need to do. Ideally, school personnel and parents can use the situation as an occasion for productive dialogue and cooperation in reaching mutual goals. Less ideally, parents may interpret students' scores as solely an evaluation of teachers' effectiveness, and teachers may interpret the situation as a threat. That is unfortunate, because the responsibility for student learning certainly rests with everyone involved, parents as well as teachers and students and the entire school system.

If we are to do the optimal job of using test results for improving teaching and learning, we need more and better information from research on how learning occurs, and we need it in terms teachers and prospective teachers find useful. We need better understanding about what makes the light of learning come on in students and what turns it off. Is there a particular time or circumstance

that makes a youngster lose enthusiasm for learning? and what can we do about that? We need to know more about how to stimulate learning and about better ways of teaching the basics.

We also need to improve preservice education for teachers. I believe, although many people disagree with me, that we need to initiate systematic competency testing as a part of teacher education requirements at the college level. Prospective teachers should be able to demonstrate certain basic competencies and should be required to remediate deficiencies before they are allowed to enter a teacher education cycle in an institution of higher education. The status of teachers has declined in past years, at least in terms of the regard in which they are held by the community, and some of that may be related to the fact that we have not been as rigorous as we might be in our requirements for entry into the teaching profession. I know that academic competence by itself does not necessarily make a good teacher--common sense, compassion and those kinds of qualities are equally important--but I don't think we need to sacrifice any of these desirable traits.

My hope is that we will not make any substantial changes in policy or procedures of our competency testing program until we get six or seven years of data about how our students are doing in the areas we presently test. Then it may be time to consider whether we should include more disciplines among those we label "basic." For now, we will continue to revise and improve our present program.